(Specification at page 17, lines 11-14). The Z-axis positioning mechanism 31 corresponds to a concrete example of the movement and positioning means of the present invention (Specification at page 17, lines 22-25).

However, Uzoh *fails* to disclose, teach or suggest a movement and positioning means for moving and positioning the polishing pad 64 to a target position in a direction facing the wafer W.

The claims include a relative moving means for making the polished surface of said polishing object and the polishing surface of said polishing tool relatively move along a predetermined plane.

The specification as originally filed teaches that the X-axis movement mechanism 41 corresponds to a concrete example of the rotating and holding means and the relative moving means of the present invention (Specification at page 17, lines 19-22). The X-axis movement mechanism 41 has a wafer table 42 for chucking the wafer W, a holder 45 for rotatably holding the wafer table 42, a drive motor 44 for supplying a drive force for rotating the wafer table 42, a belt 46 for connecting the drive motor 44 and the rotation shaft of the holder 45, a polishing pan 47 provided in the holder 45, an X-axis slider 48 at which the drive motor 44 and the holder 45 are disposed, an X-axis servo motor 49 mounted on a not illustrated base, a ball screw shaft 49a connected to the X-axis servo motor 49, and a moveable member 49b connected to the X-axis slider 48 and with a screw portion screwed into the ball screw shaft 49a formed therein (Specification at page 18, line 23 to page 19, line 10). The X-axis servo motor 49 is driven to rotate by the drive current supplied from an X-axis driver 54 connected to the X-axis servo motor 49 (Specification at page 19, lines 19-21). The X-axis slider 48 moves in the X-axial direction via the ball screw shaft 49a and the moveable member 49b (Specification at page 19, lines 21-23). At this time, by controlling the drive current supplied to the X-axis servo motor 49, the control of the speed of the wafer table 42 in the X-axial direction becomes possible (Specification at page 19, line 23 to page 20, line 1).

However, Uzoh also *fails* to disclose, teach or suggest a relative moving means for making the polished surface of the wafer W and the polishing surface of the polishing pad 64 relatively move along a predetermined plane.

Page 2 of the Advisory Action includes a reference to Figures 13 and 15 Uzoh in its reasoning for the continued rejection of the claims. In this regard, the position of the Examiner has shifted since no specific reference to Figure 15 is found within the Final Office Action. Nevertheless, page 2 of the Advisory Action contends that Figure 15 of Uzoh teaches a movement and positioning means for moving and positioning the polishing pad 64 to a target position in a direction facing the wafer W.

In response to this contention, Figure 11 arguably teaches a presence of a polishing pad 64 on a rotatable platen 62. Moreover, Figure 13 of Uzoh also teaches the presence of a polishing pad 64. However, Figure 15 of Uzoh fails to teach the presence of a polishing pad 64 on a rotatable platen 62. Instead, Figure 15 of Uzoh arguably teaches the presence of a wafer W held on a carrier table CT (Uzoh at column 3, lines 66-67). Although Figure 15 of Uzoh arguably teaches the presence of a movable polishing head MPH (Uzoh at column 3, line 67 to column 4, line 1), Uzoh fails to disclose, teach or suggest the polishing head MPH as being moveable in a direction facing the wafer W.

Claim 35 - The rejection of claim 35 is traversed at least for the reasons provided hereinabove with respect to claim 33, and for the following reasons.

Within claim 35, said polished object comprises a stack of a plurality of films comprised of different materials, and the current flowing from the surface of the polished object to the polishing tool through the electrolyte, changing in response to differences in the electrical characteristics of the materials of the films, is monitored and the progress in the polishing is managed based on the magnitude of the electrolytic current.

Uzoh arguably teaches that preferably, the source of potential 80 is electronic computer controlled--FIG. 13. FIG. 13, the source 80 includes or is connected to a controller having a CPU (eg, microprocessor), Memory, Buses, I/O ports, all suitably interconnected to signal receiver circuits 81 and to an endpoint detector arrangement, to control the current i according, eg, to the waveforms of FIG. 14 (Uzoh at column 5, lines 22-28). Software instructions and data can be coded and stored within the Memory, for causing the controller to generate suitable signals to the source 80 to control the current i. (Uzoh at column 5, lines 28-32). Yet, Uzoh fails to disclose, teach or suggest that the current flowing from the surface of the

wafer W to the pad 64 through the electrolyte, changing in response to differences in the electrical characteristics of the materials of the films, is monitored and the progress in the polishing is managed based on the magnitude of the electrolytic current.

Claim 39 - The rejection of claim 35 is traversed at least for the reasons provided hereinabove with respect to claim 33, and for the following reasons.

Claim 39 includes the step of managing the progress of the polishing of the polished object based on the magnitude of the electrical resistance between said electrode member and said polishing tool through the surface of the polished object.

However, a step of managing the progress of the polishing of the polished object based on the magnitude of the electrical resistance between said electrode member and said polishing tool through the surface of the polished object is absent from within Uzoh.

Claim 41 - As noted hereinabove, Uzoh also *fails* to disclose, teach or suggest a step of making the polishing surface of said polishing tool and the metal film of said polishing object move relatively along a predetermined plane and selectively removing a passivation film on a projecting portion projected from the polishing surface of said polishing tool in said metal film by mechanical polishing by said polishing tool.

Claim 43 - The rejection of claim 43 is traversed at least for the reasons provided hereinabove with respect to claim 41, and for the following reasons.

Within claim 43, said passivation film comprises of an oxide film formed by oxidizing the surface of said metal film.

Uzoh arguably teaches that the wafer includes, for example, a Si substrate 14 having an insulator 16 (eg, a SiO_2 layer), a conductor 18 (eg, a Cu layer) and a microelectronic component 20 (eg, a CMOS device) disposed thereon (Uzoh at column 1, lines 34-38). However, Uzoh fails to disclose, teach or suggest insulator 16 as being a passivation layer.

Claim 45- The rejection of claim 45 is traversed at least for the reasons provided hereinabove with respect to claim 41, and for the following reasons.

Within claim 45, said passivation film is higher in electrical resistance and lower in mechanical strength compared with the metal film. However, Uzoh fails to disclose, teach or suggest a passivation film that is higher in electrical resistance and lower in mechanical strength compared with the metal film.

Claim 47- The rejection of claim 47 is traversed at least for the reasons provided hereinabove with respect to claim 41, and for the following reasons.

Claim 47 includes the step of managing the progress of the polishing based on the magnitude of the electrical resistance between said electrode member and said polishing tool. The specification as originally filed teaches that the electrolytic power supply 61 is provided with a resistance meter 63 as a resistance value detecting means of the present invention (Specification at page 30, lines 12-14). However, a step of managing the progress of the polishing based on the magnitude of the electrical resistance between said electrode member and said polishing tool is absent from within Uzoh.

Conclusion

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

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Respectfully submitted,

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